

### **REMARKS**

Claims 1-22 are now in the application. Claims 1, 13, 15, and 16 have been amended. Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

Applicants wish to thank Examiners Ingberg and Kiss for the interview of March 21, 2007. The interview summary accurately reflects the interview and the agreement reached during the interview.

The claims were rejected under 35 U.S.C. §103 as stated in the Official Action of November 29, 2006. This rejection was discussed in the interview. As explained then, the invention analyzes the source code listing to create computer models that are transformed to reflect the transformations expressed in the source code itself. Among other things, the models capture the range of possible values that an operand or argument may have as consequence of the source code expressions. For example, a model may reflect the values in a buffer as opposed to simply the size of a buffer. As was discussed during the interview the claim language and proposed amendments clarify the invention's distinctions vis-à-vis constraint-based or formal method approaches like Wagner (or Larochelle).

All independent claims now capture the aspect in which models are transformed to reflect transformations in the source code expressions themselves and to capture the range of possible values the operands or routine arguments may have.

All dependent claims should be found allowable because they depend from independent claims that should be found allowable. They also contain several independently novel and non-obvious features. For example, claims 2-14 recite in greater detail the type of structures and characteristics that may be modeled. Claims 17-19 recite a database that is actually used to drive and support the analysis of the source code whereas the cited art database seems to simply report knowledge to be used by a human, not by the software.

Support for the claim amendments may be found throughout the specification. Particular portions which may be of interest include paragraphs 10-17, which describe basic flow and basic functionality; paragraphs 18-29 describe certain models (and related structures) that may be used to model characteristics of operands, such as variables and buffers, including how to model values; paragraphs 30-49 discuss ways in which the models are formed and transformed via

analysis of the code (paragraph 40 may be of particular interest in discussing how after models for the operands (e.g., variables) are formed then each statement (i.e., expression) in the routine is visited and that sub-expressions are processed before expressions are processed); paragraphs 50-68 discuss specific examples (NB: example 1 shows the tracking of the exact string values in the example code segment) ; paragraphs 69- 80; paragraphs 81- 88 discuss examples of the processing of argument models; paragraphs 89 – 114 discuss the processing of the call sites using argument models.

In view of the amendments and remarks made above, applicants believe the pending application is in condition for allowance. The Commissioner is hereby authorized to charge the required fee of \$60.00 for filing the request for one-month extension of time to our Deposit Account No. 08-0219. Please apply any charges not covered, or any credits, to Deposit Account No. 08-0219.

Respectfully submitted,



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